

MANAGEMENT OF GAGGING IN COMPLETE DENTURE WEARER- A CASE REPORT

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ABSTRACT: Gagging is a common phenomenon observed in Upper Complete denture patients. An Approach in management of Severe GAG reflex in an Edentulous patient who were to undergo complete Denture prosthesis.

KEYWORDS: Gagging, Complete Denture gag reflex.

INTRODUCTION

The gag reflex is an involuntary contraction of the muscles of the soft palate, or the pharynx that result in retching. It is a physiologic reaction that protects the airways from foreign body aspiration^{1,2}. In retching, peristalsis becomes spasmodic, uncoordinated, and the direction is reversed, air is forced over the closed glottis producing a characteristic retching sound. Patient who gag, present with a range of disruptive reactions, ranging from simple contraction of the palatal, or circum-oral musculature, to spasm of pharyngeal structure, accompanied by vomiting. In some individuals this reflex is overtly exaggerated. Such exaggerated gag reflex often dissuades the patient from seeking regular oral care. As a consequence, the severely affected patient tends not to seek regular oral care, presenting only when in pain, and may request treatment under general anesthesia. Dental procedures for such patient can be a harrowing procedure for the dental team. The patient becomes distressed because of nausea and spasmodic muscle reflexes. The gag reflex comes in way for the dentist in providing quality treatment procedures. The dental operator will have a long downtime if the patient vomits in the dental chair. The dental assistants and staff will have a hard time cleaning up the mess, disrupting the days schedule and appointments.

Gagging has been generally classified as either Somatogenic, or Psychogenic. Psychogenic gagging is induced by anxiety, fear, and apprehension^{3,4}. Possible causes may be thoroughly investigated rather than placing the blame on the psychological make-up of the patient. Gag reflexes that are hyperactive and overtly exaggerated due to various reasons are not uncommon. This kind of reflex is problematic for a dentist even to take an impression or to fit prosthesis. It is a situation where failure to overcome the hyperactive reflex may leave the patient

permanently edentulous. Leaving the patient not only esthetically disagreeable, but also brings down the morale of the patient along with nutritional state which is detrimental to General well-being of the patient.

Desensitization can also work well. In this method patients are to be given various dental tools or instruments, such as a mouth mirror and an impression tray, for them to take home. They are advised to introduce these instruments into their mouth by themselves. Patients are advised to time the exercise by making a log of duration, frequency and number of times they do the exercise⁵. Patient, by doing this exercise few times a day, starting with twice a day, to a gradually increasing number of times, in a day, becomes less sensitive to the gag reflex⁶.

Case report

A 45 year old female patient with edentulous maxilla and FPD in the mandibular arch presented to the clinic with a chief complaint of inability to wear her denture (**Fig.1**). A careful history and examination revealed that she had a maxillary complete denture which was done 2 years ago by her previous dentist. She had a severe gag reflex with the denture; she says even the thought of keeping the denture in her mouth results in nauseating feeling. Because of this reason she could not wear denture and its affecting her social life bad.

Treatment plan

The Implant supported overdenture was ruled out because of presenting medical condition of diabetes and osteoporosis. A cast metal upper denture was planned as the matte finish of the metal gives less gagging.



Fig.1. Patient with edentulous maxilla and gag reflex



Fig.2. cast metal denture base.

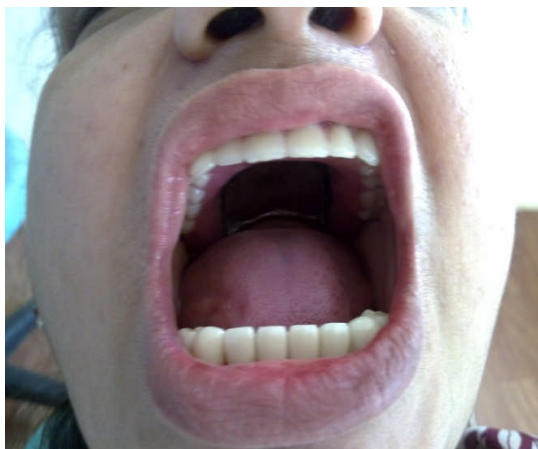


Fig.3.patient wearing the denture without any gag reflex

A psychological preparation of patient, in a systematic manner is used by careful explanation of the treatment plan, and the impression making procedure. The purpose of each step was illustrated to the patient to reduce the fear and anxiety. Patient has been given an acrylic palatal plate for desensitization. She is advised to use it for one month. Repeated counseling was given to encourage her. After one month she was able to keep it for 1hour continuously.

Technique

Primary impression is made with alginate impression material. Border molding is done conventionally with low fusing greenstick material. Topical anesthetic spray is sprayed to reduce the soft palate irritation. Secondary impression is made with light body addition silicone impression material (ExpressXT from 3M). Jaw relations were recorded. Posterior seal is marked and transferred on to the cast so that the posterior border of the denture is should not extend beyond the soft palate. Denture is fabricated with cast metal denture base(Fig.2).. The polished surface of metal denture base is matte finished, but not smooth finish. (Smooth surface may also cause nausea in some patients).

Patient was given denture, and routine denture instructions were given. She is advised to wear the denture for short time initially, and slowly increase the time. Post insertion check-up done after 24hrs. Corrections were carried out for the better treatment outcome and patient comfort. (Fig.3).

Discussion:

The gagging problem has been a topic of research for many authors since long time. This problem gains a special attention in prosthodontic field as it complicates the task of impression taking, and may even prevent the patient from wearing his prostheses causing social stigma and functional difficulty in maintaining good health^{7,8}. Based on the clinical judgments, and possibilities in clinical scenarios should be taken in consideration in the management of such patients.

CONCLUSION:

Management of Hyperactive Gag reflex tends to be based on experience, clinical judgments, prosthodontic management and a combination thereof. Medication and Psychologist referral may be regarded as the adjunctive therapies. Some gaggers need services from a trained specialist in this area; the dentist should not hesitate in referring patients to take their help in addition to dental services.

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